



State of New Jersey  
Department of Environmental Protection and Energy  
Division of Responsible Party Site Remediation  
CN 028  
Trenton, NJ 08625-0028

Scott A. Weiner  
Commissioner

Karl J. Delaney  
Director

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

JAN 19 1993

Edward A. Hogan, Esq.  
Porzio, Bromberg & Newman  
163 Madison Avenue  
Morristown, NJ 07960

Re: Hexcel Corporation (Hexcel)  
Lodi Borough, Bergen County  
ECRA Case # 86009

Dear Mr. Hogan:

This is in response to the October 15, 1992 Progress Report submitted by Killam Associates on behalf of Hexcel Corporation for the above referenced site.

The New Jersey Department of Environmental Protection and Energy (NJDEPE) has reviewed this report and has the following comments. Hexcel shall submit the information in items 1., 2., 12. and 15.a. below to this office along with the Progress Report due on or before February 15, 1993.

1. Hexcel shall submit a proposal for the installation of a shallow overburden monitoring well on the opposite side of Saddle River (approximately opposite MW-8). Monitoring well MW-8 has contained separate phase petroleum product and high levels of dissolved phase petroleum product. Given this, and the fact that the top of the clay layer at MW-8 is approximately five feet lower in elevation than the bottom of the adjacent stream (according to stream channel elevations measured in November 1990), the NJDEPE is concerned that dense non-aqueous phase liquids (DNAPLs) and dissolved phase contamination may have migrated under the stream to the other side.
2. A hydraulic connection between the lower overburden and the bedrock was demonstrated during packer testing of the production well. This suggests that ground water contamination within the bedrock would be likely where high levels of contamination are present in the lower overburden, particularly in the location around monitoring well MW-1.

Packer testing and the 1991 sampling of the production well revealed bedrock contamination that is only marginally above the proposed ground water cleanup standards. However, the production well is not located in the area where high levels of overburden contamination have been detected. The production well does not monitor the bedrock ground water in an area of elevated overburden contamination. Hexcel shall submit a proposal for the installation of a bedrock monitoring well in the area of MW-1. The well shall be designed to monitor the first water in the bedrock.



3. Hexcel shall collect a round of ground water samples from the following monitoring wells and submit the results to this office. All samples shall be analyzed for volatile organic compounds with a forward library search (VO+15):

a. Shallow overburden wells:

- i. The new well across Saddle River.
- ii. Clockwise around the perimeter of the well network: CW-1; MW-20; MW-22; MW-31; MW-29; MW-24; MW-25; MW-10; CW-11; CW-14; MW-8; ~~CW-28~~ and ~~MW-21~~.  
MW CW
- iii. Within the plume: MW-17; MW-18; MW-4; RW6-2; MW-6; MW-16 and MW-12.

b. Deep overburden wells: MW-1; MW-3; MW-5; MW-7; MW-9; MW-11 and MW-13.

c. The new bedrock monitoring well.

Re-sampling of the existing wells is necessary to reveal the extent of contamination migration that has occurred since previous sampling, if any, and should help to reveal contaminant concentration trends at representative points within the plume.

4. Hexcel shall evaluate the need for installation of additional delineation wells on the basis of results of the sampling required in item 2. above.

- a. After the next sampling round, if monitoring well MW-1 continues to display elevated volatile organic compounds (VOs) concentrations, Hexcel shall propose installation of a deeper overburden well, down gradient of MW-1.
- b. None of the deeper overburden wells installed along the stream have contained elevated levels of VOs and, therefore, installation of a deeper overburden well on the opposite side of the stream is not required at this time. Hexcel shall propose installation of a deeper overburden well on the opposite side of the stream if the results of the latest round of sampling indicates contamination has migrated to the lower overburden, or, if contamination is detected in the shallow overburden well to be installed on the opposite side of the stream pursuant to item 1 above.
- c. If significant contamination is detected in the bedrock monitoring well that is to be installed, Hexcel shall propose additional bedrock wells for delineation.

5. Ground water cleanup goals for the former Hexcel site shall be protective of the nearby surface water receptor. Therefore, for each compound detected in the ground water at the Hexcel site, the cleanup standard shall be the more stringent standard of the following:

- a. The proposed ground water cleanup standards for Class IIA ground water.
- b. The proposed New Jersey Pollutant Discharge Elimination System Surface Water Quality Criteria for a given compound, if the more stringent of the two is below the practical quantitative limit (PQL), the cleanup standard shall be the PQL.

6. Regarding the ground water cleanup standards, Hexcel is advised of the following:

- a. For a given area for which active ground water remediation is required, the cleanup standards need not necessarily be achieved in all monitoring wells within that area. Rather, the NJDEPE will require only that the standards be met and maintained at the down gradient compliance points. Specific performance requirements for the recovery system and criteria for demonstrating its effectiveness will be developed once Hexcel and the NJDEPE are in agreement that all necessary monitoring wells and recovery wells have been installed and the final recovery system is operational.
- b. Provided excessive levels of ground water contamination are not detected in the bedrock ground water, the NJDEPE would entertain a proposal of natural remediation of the bedrock aquifer. Such a proposal must be prepared in accordance with requirements contained in the proposed ground water cleanup standards.
- c. Surface water is considered a receptor for both the upper and the lower overburden ground water. Hexcel may submit a proposal of for alternate cleanup goals that are protective of human health. NJDEPE guidance and requirements to address such a proposal are expected to become available in the near future. Because the definition of specific, final cleanup goals for the overburden ground water appears unnecessary at this time, the NJDEPE recommends that Hexcel defer the proposal for alternate cleanup goals.

7. The wells selected for the ground water contour mapping program are acceptable, however, Hexcel shall include recovery wells: CW-3; CW-5; CW-9; CW-11; CW-15 and CW-18, in the program. The proposed frequency of ground water level collection is also acceptable. Hexcel shall submit ground water contour maps for each of the monthly and quarterly water level collection events. Hexcel is advised that quarterly ground water sampling will eventually be required, in addition to the water level monitoring, to demonstrate the effectiveness of the ground water recovery system.

8. Once the control well system has been in continuous operation and sufficient water level data under pumping conditions has been generated, Hexcel shall submit an evaluation of the net zone of the capture of the system. Hexcel has indicated that ground water levels will be measured on a frequent basis during the first few weeks of system testing. Contour maps for this period of water level collection shall be included in the evaluation.

Also, Hexcel is advised that the levels of contamination found in deep overburden well MW-1 indicated the need for remediation of the lower overburden aquifer. The NJDEPE noted this in a July 12, 1991 correspondence and stated that additional control wells with deeper screens might be required to gain hydraulic control of the entire vertical and horizontal extent of the plume. Hexcel shall address this issue in the evaluation of the control-well system capture zone.

9. The light non-aqueous phase liquids (LNAPLs) monitoring program is acceptable, however, Hexcel shall include monitoring wells CW-5 and CW-9 in the program, if possible. Each of these wells have contained an emulsion and a trace of LNAPL was observed in CW-5 on at least one occasion.

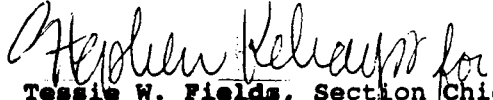
10. The proposal for the installation of a passive product recovery unit on monitoring well CW-7 is acceptable.
11. The wells selected for DNAPL monitoring are acceptable, however, Hexcel shall include well CW-17 in the monitoring program. The proposal to reduce the frequency of monitoring in a given well, if the well shows no DNAPL for six consecutive events, is acceptable, however, the monitoring shall be reduced to a quarterly basis rather than an annual basis.
12. The NJDEPE acknowledges that the DNAPL recharge rate to RW7-1 and RW7-5 has decreased, however, the amount of DNAPL recovered from the two wells (roughly five gallons per month) is still substantial. Apparently, the DNAPL system is operated manually for only several hours per month. Hexcel shall address whether the DNAPL recovery system could be operated more frequently.

Additionally, the proposal to pump DNAPL manually from other wells, if and when DNAPL appears, is acceptable at this time for all wells except MW-8. MW-8 has contained DNAPL in all measurements reported since 1988. High concentrations of dissolved contamination, associated with product, have also been present in this well. Recovery of the product in this location is considered a priority due to its proximity to a surface water receptor. Therefore, Hexcel shall address whether MW-8 can be connected to the RW7-1/RW7-5 DNAPL recovery system.

13. Hexcel shall initiate the LNAPL and DNAPL monitoring programs beginning February, 1993. With each monthly progress report, Hexcel shall submit tables that indicate which wells were measured for LNAPL and DNAPL, the results for each well, the amount of product recovered from each well and the total amount of product recovered from each well to date.
14. The "receptor study" requirement has been satisfied by the Hexcel submittal of "Conceptual Hydrogeologic Model of the Hexcel Site".
15. General comments:
  - a. Hexcel shall submit a revised time schedule for the remediation of the ground water. The schedule shall indicate the time frames for all monitoring and sampling, well installations and the startup date of the recovery system. The schedule shall also include the time frames for all requirements of this letter. In addition, the schedule shall indicate the dates for submittal of all sampling data and reports, including the final report for ground water remediation.
  - b. Hexcel shall perform all sampling procedures in accordance with the protocol outlined in the May 1992 edition of the "NJDEPE Field Sampling Procedures Manual".
  - c. Hexcel shall notify the case manager at least 14 calendar prior to the initiation of any remedial activities so that a representative from the NJDEPE may be present.

If you have any questions regarding this letter, please contact the Case Manager, Kathleen M. Katz, at (609) 633-7141.

Sincerely,

  
Tessie W. Fields, Section Chief  
Bureau of Environmental Evaluation and  
Cleanup Responsibility Assessment

c: Michael McCann, BEERA  
Beverly Phillips, BGWPA  
William Nosal, Hexcel Corporation  
William Hoehlein, Killman Associates  
James Higdon, FOA Corporation